

What is needed to move towards a sustainable decentralised energy generation model

The current energy generation market is largely centralised, but there are strong indicators that generation should become more decentralised, as it would help to match the demands much better. Part of this has started to happen already through e.g. domestic solar PV, and to a limited extent the addition of storage as well. From a technical side this brings interesting challenges as to how all these devices, for energy generation and storage will need to interact to ensure energy provision within their local area, while being able to share with the neighbouring community as and when required. The energy demand in this context should neither be restricted to either electrical or heat, as there are potential benefits in combining the two systems as well. Besides these technical challenges, there are also the economic and political challenges as to how some of the current beneficiaries, namely the large energy providers, can move forwards and play a role in this new model while simultaneously also moving towards a more sustainable business model where the customer is put more central. By making customers more involved in their generation, they will also become more aware of their consumption, while the creation of communities will help them to build a more community aware aspect of living.